

**AMENDMENT TO THE CLAIMS:**

1. (Cancelled)

2. (Currently Amended) ~~The equipment of claim 1,~~ Muscle fatigue measuring equipment comprising:  
myoelectric change acquiring means,  
extracellular fluid change acquiring means, and  
muscle fatigue status determining means,  
wherein the myoelectric change acquiring means acquires a myoelectric change of a  
living body,  
the extracellular fluid change acquiring means acquires a change in extracellular fluid of  
the living body, and  
the muscle fatigue status determining means determines a muscle fatigue status from the  
myoelectric change acquired in the myoelectric change acquiring means and the change in  
extracellular fluid acquired in the extracellular fluid change acquiring means in accordance with  
criteria for determining a muscle fatigue status based on a myoelectric change and a change in  
extracellular fluid,

wherein the myoelectric change acquiring means comprises:

myoelectric potential measuring means,

first storage means, and

myoelectric change computing means,

the myoelectric potential measuring means measures a myoelectric potential occurring along with the movement of a muscle of a living body so as to determine a myoelectric value,

the first storage means stores an arithmetic expression for determining a myoelectric change and a myoelectric value at a base time, and

the myoelectric change computing means computes a myoelectric change by substituting the myoelectric value determined by the myoelectric potential measuring means and the myoelectric value stored in the first storage means into the arithmetic expression stored in the first storage means, and

the extracellular fluid change acquiring means comprises:

biological impedance measuring means,

second storage means, and

extracellular fluid change computing means,

the biological impedance measuring means provides an alternating current to a living body and measures a voltage caused by a biological impedance so as to determine an extracellular fluid,

the second storage means stores an arithmetic expression for determining a change in extracellular fluid and an extracellular fluid at a base time, and

the extracellular fluid change computing means computes a change in extracellular fluid by substituting the extracellular fluid determined by the biological impedance measuring means and the extracellular fluid stored in the second storage means into the arithmetic expression stored in the second storage means.

3. (Original) The equipment of claim 2, which has measuring electrodes serving both as communication ports to detect the myoelectric potential in the myoelectric potential measuring means and as communication ports to detect the voltage caused by the biological impedance in the biological impedance measuring means and which also has a switching device that switches a

signal of the myoelectric potential from the measuring electrodes and a signal of the voltage caused by the biological impedance from one to another.

4. (Currently Amended) ~~The equipment of claim 1,~~ Muscle fatigue measuring equipment comprising:

myoelectric change acquiring means,

extracellular fluid change acquiring means, and

muscle fatigue status determining means,

wherein the myoelectric change acquiring means acquires a myoelectric change of a living body,

the extracellular fluid change acquiring means acquires a change in extracellular fluid of the living body, and

the muscle fatigue status determining means determines a muscle fatigue status from the myoelectric change acquired in the myoelectric change acquiring means and the change in extracellular fluid acquired in the extracellular fluid change acquiring means in accordance with criteria for determining a muscle fatigue status based on a myoelectric change and a change in extracellular fluid,

wherein the muscle fatigue status determining means determines a muscle fatigue status by a series of procedural steps including ,i.e., comparing a myoelectric change acquired by the myoelectric change acquiring means with a reference value for determining whether the myoelectric change is a myoelectric change at a normal time or not so as to determine the presence or absence of muscle fatigue as the muscle fatigue status, comparing a change in extracellular fluid acquired by the extracellular fluid change acquiring means with a reference

value for determining whether the change in extracellular fluid is a change in extracellular fluid at a normal time or not so as to determine the equilibrium state of the muscle fatigue as the muscle fatigue status, and comparing the change in extracellular fluid acquired by the extracellular fluid change acquiring means with a reference value for determining whether the change in extracellular fluid is larger or smaller than the change in extracellular fluid acquired last time so as to determine the progress of the muscle fatigue as the muscle fatigue status.

5. (Original) The equipment of claim 2, wherein the muscle fatigue status determining means determines a muscle fatigue status by a series of procedural steps, i.e., comparing a myoelectric change acquired by the myoelectric change acquiring means with a reference value for determining whether the myoelectric change is a myoelectric change at a normal time or not so as to determine the presence or absence of muscle fatigue as the muscle fatigue status, comparing a change in extracellular fluid acquired by the extracellular fluid change acquiring means with a reference value for determining whether the change in extracellular fluid is a change in extracellular fluid at a normal time or not so as to determine the equilibrium state of the muscle fatigue as the muscle fatigue status, and comparing the change in extracellular fluid acquired by the extracellular fluid change acquiring means with a reference value for determining whether the change in extracellular fluid is larger or smaller than the change in extracellular fluid acquired last time so as to determine the progress of the muscle fatigue as the muscle fatigue status.

6. (Original) The equipment of claim 3, wherein the muscle fatigue status determining means determines a muscle fatigue status by a series of procedural steps, i.e., comparing a myoelectric change acquired by the myoelectric change acquiring means with a reference value for determining whether the myoelectric change is a myoelectric change at a normal time or not

so as to determine the presence or absence of muscle fatigue as the muscle fatigue status, comparing a change in extracellular fluid acquired by the extracellular fluid change acquiring means with a reference value for determining whether the change in extracellular fluid is a change in extracellular fluid at a normal time or not so as to determine the equilibrium state of the muscle fatigue as the muscle fatigue status, and comparing the change in extracellular fluid acquired by the extracellular fluid change acquiring means with a reference value for determining whether the change in extracellular fluid is larger or smaller than the change in extracellular fluid acquired last time so as to determine the progress of the muscle fatigue as the muscle fatigue status.

7. (Cancelled)

8. (Original) The equipment of claim 2, wherein the extracellular fluid is the ratio of an extracellular fluid to intracellular and extracellular fluids.

9. (Original) The equipment of claim 3, wherein the extracellular fluid is the ratio of an extracellular fluid to intracellular and extracellular fluids.

10. (Original) The equipment of claim 4, wherein the extracellular fluid is the ratio of an extracellular fluid to intracellular and extracellular fluids.

11. (Original) The equipment of claim 5, wherein the extracellular fluid is the ratio of an extracellular fluid to intracellular and extracellular fluids.

12. (Original) The equipment of claim 6, wherein the extracellular fluid is the ratio of an extracellular fluid to intracellular and extracellular fluids.